

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Application No.: 10/604,030
Filing Date: June 23, 2003
Inventor (first named): Florence
Group Art Unit: 1745
Examiner Name: KALAFUT, Stephen J.
Attorney Docket No.: 53797.13 (formerly 45283.85)

Certificate of Transmission Under 37 C.F.R. 1.8(a)

I hereby certify that this document is being electronically transmitted on this date March 26, 2006 to
EFS to the U.S. Patent and Trademark Office, Attention: Examiner Kalafut,
at Group Art Unit 1745 in Arlington, VA 22202

Edward Yoo

DATED: March 26, 2006

AMENDMENT & RESPONSE TO OFFICE ACTION MAILED 29/10/2005

To: Assistant Commissioner for Patents
Washington, DC 20231

Sir:

This is in response to the Office Action mailed October 29, 2005 and is within the six month statutory period for reply, with a petition and fees for an extension of two months. Please enter the amendments below and consider the remarks which follow.

AMENDMENTS TO THE CLAIMS

- 1-7. (Cancelled)
8. (Currently Amended) The A fuel cell stack enclosure ~~of claim 1~~ **which fully or partially encloses a fuel cell stack**, comprising:
- (a) at least three closed concentric cylindrical shells including an outer shell, an inner shell and at least one intermediate shell;
 - (b) wherein the outer shell and the at least one intermediate shell define a first annular chamber between them, and the inner shell and the at least one intermediate shell define a second annular chamber between them;
 - (c) an intake port defined by the outer shell for providing fluid communication from the exterior of the enclosure to the first annular chamber;
 - (d) a cross-over port defined by the intermediate shell for providing fluid communication between the first annular chamber and the second annular chamber;
 - (e) an outlet port defined by the inner shell for providing fluid communication between the second annular chamber and the interior space of the enclosure.
9. (Original) The enclosure of claim 8 wherein the intake port directs air tangentially into the first annular chamber.
10. (Original) The enclosure of claim 8 wherein the cross-over port is a vertically flattened oval.
11. (Original) The enclosure of claim 8 wherein the intake port and the cross-over port are located on opposing vertical ends of the enclosure.
12. (Original) The enclosure of claim 8 comprising three closed concentric shells.

13. (Original) The enclosure of claim 8 further comprising means for pumping air into the first annular chamber through the intake port.
14. (Original) The enclosure of claim 8 wherein the enclosure comprises two semi-cylindrical halves and further comprises means to pass fluids between the first annular chambers and second annular chambers respectively.
15. (New) A solid oxide fuel cell stack assembly, comprising a fuel cell stack enclosure which fully or partially encloses a fuel cell stack, said enclosure having at least one chamber having intake means for accepting a reactant and exhaust means for passing the reactant to the fuel cell stack, and said enclosure accepts radiative heat from the fuel cell stack.
16. (New) The fuel cell stack assembly of claim 15 wherein the enclosure comprises three layered chambers, wherein an inner chamber is adjacent the fuel cell stack and an intermediate chamber is disposed between an outer chamber and the inner chamber; and wherein reactant flow is directed into the outer chamber, then into the intermediate chamber, then into the inner chamber and finally into the fuel cell stack, directly or indirectly.
17. (New) The fuel cell stack assembly of claim 16 wherein the enclosure comprises at least two substantially planar sections.
18. (New) The fuel cell stack assembly of claim 17 wherein the enclosure comprises three substantially planar sections.
19. (New) The fuel cell stack assembly of claim 16 further comprising an insulating layer disposed between the inner chamber and the intermediate chamber or between the intermediate chamber and the outer chamber.
20. (New) The fuel cell stack assembly of claim 16 further comprising an insulating layer disposed between the inner chamber and the fuel cell stack.
21. (New) The fuel cell stack assembly of claim 16 further comprising control means for varying reactant flow rate through the enclosure.